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(71) Applicants and

(72) Inventors: ZHOU, Xiaochuan [CN/US]; 2212B Bellefontaine Street, Houston, TX 77030 (US). GAO, Xiaolian [US/US]; 2212B Bellefontaine Street, Houston, TX 77030 (US). GULARI, Erdogan [US/US]; 3886 Penberton Dr., Ann Arbor, MI 48105 (US).

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(54) Title: FLUIDIC DEVICES AND METHODS FOR MULTIPLEX CHEMICAL AND BIOCHEMICAL REACTIONS

(57) Abstract: The present invention describes microfluidic devices that provide novel fluidic structures to facilitate the separation of fluids into isolated, pico-liter sized compartments for performing multiplexing chemical and biological reactions. Applications of the novel devices including biomolecule synthesis, polynucleotide amplification, and binding assays are also disclosed.